



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,279	03/24/2000	Gang Lu	2762.2001-002	2501

21005 7590 06/20/2005

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

HARRELL, ROBERT B

ART UNIT	PAPER NUMBER
----------	--------------

2142

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/535,279

Applicant(s)

LU ET AL.

Examiner

Robert B. Harrell

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-40 is/are pending in the application.
- 4a) Of the above claim(s) 41-85 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached Office Action</u> . |

Art Unit: 2142

1. Claims 1-4 and 7-40 are presented for examination with claims 5 and 6 cancelled and with claims 41-85 withdrawn from further consideration as non-elected inventions.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The claims are more directed to –A System For Automatically Assigning A Network Address And Configuration To A Node Connected To A SubNetwork–.

3. The applicant should use this period for response to thoroughly and very closely proof read and review the whole of the application for correct correlation between reference numerals in the textual portion of the Specification and Drawings along with any minor spelling errors, general typographical errors, accuracy, assurance of proper use for Trademarks TM, and other legal symbols ®, where required, and clarity of meaning in the Specification, Drawings, and specifically the claims (i.e., provide proper antecedent basis for “the” and “said” within each claim; also claim 32 (line 5) requires a new line after the “,” prior to the second network device which also requires a verb phrase (i.e., the second network device for performing)). Minor typographical errors could render a Patent unenforceable and so the applicant is strongly encouraged to aid in this endeavor.

4. The following is a quotation of the second paragraph of 35 U.S.C 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4 and 7-40 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The scope of meaning of the following claim language is not clear:

- a) “the given network node”—claim 1 (line 7)[*note lines 1-2 and 6*];
- b) “the extracted IP addresses”—claim 7 (line 1);
- c) “the first network node”—claim 26 (last two lines);
- d) “the network in the subnet”—claim 32 (line 5);
- e) “the second network device”—claim 32 (lines 5-6);
- f) “the available network”—claim 34 (second to the last line).

6. As to 5 (a-f) above, these are but a few examples of numerous cases where clear antecedent basis are lacking and not an exhausting recital. Any other term(s) or phrase(s) over looked by examiner and not listed above which start with either “the” or “said” and do not have a single proper antecedent basis also is indefinite for the reasons outlined in this paragraph. Also, these are but a few examples where term(s) or phrase(s) are introduced more than once without adequate use of either “the” or “said” for the subsequent use of the term(s) or phrase(s). Moreover, multiple introduction of a term, or changes in tense, results in a lack of clear antecedent basis for term(s) or phrase(s) which relied upon the introduced term. Other matters of such, as examples, would be in claim 1 (line 9 “network node” again reintroduced) and “list” in

Art Unit: 2142

claim 3 and claim 7, for example(s), claim 26 (lines 1-2 and 3 “a first network node”), and “a network” in lines 1-2 and the last line of claim 38, where proper use of “the” or “said” for subsequent use of the word or phrase is lacking. Failure to correct all existing cases where clear antecedent basis are lacking can be viewed as non-responsive. Such was originally presented in examiner’s prior action to which no clear action via amendments or rebuttal was presented by the applicant in his response. Nonetheless, should a response yield all claims allowable short *a few* cases where clear antecedent basis are lacking within the claims, a preemptive authorization to enter an examiner’s amendment to the record to correct such would accelerate a notice of allowance over a final rejection. Such could be added at the end of an applicant’s response with the following statement: “Examiner is hereby authorized, without the need of further contact by examiner, to enter an Examiner’s Amendment to correct any cases where antecedent basis are lacking.” if the applicant so elects. This does not diminish the applicant’s requirement to correct all such cases not so listed in the example few given above nor prohibit any amendments after a notice of allowance by the applicant.

7. Per claim 29, it is not clearly ascertained if all packets contain the address information or packets with address information are commingled with those packets that do not have such address information in lines 7-8 of claim 29.

8. Claim 6 has been cancelled and yet there are claims still dependent thereon such as, for example, claims 7,8,9,10, and 11. Thus it cannot be clearly ascertained to which claim(s) these claims thereon depend within the claims. Thus these claims are also rejected under 35 U.S.C. 112, fourth paragraph, in addition to 112, second paragraph.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

10. Claims 1-4 and 7-40 are rejected under 35 U.S.C. (6,061,739). 102 (e) as being anticipated by Reed et al.

11. Prior to addressing the grounds of the rejections below, should this application ever be the subject of public review by third parties not so versed with the technology (i.e., access to IFW through Public PAIR (as found on <http://portal.uspto.gov/external/portal/pair>)), this Office

Art Unit: 2142

action will usually refer an applicant's attention to relevant and helpful elements, figures, and/or text upon which the Office action relies to support the position taken. Thus, the following citations are neither all-inclusive nor all-exclusive in nature *as the whole of the reference is cited* and relied upon in this action as part of the substantial evidence of record. Also, no temporal order was claimed for the acts and/or functions.

12. The rejection, and grounds for the rejection under 35 U.S.C. 102(e), presented in examiner's prior action continues and are hereby incorporated in this action by reference.

13. The applicant argued in his 08 April 2005 response that:

a) the applicants have amended independent claim 1 to recite, "posing as a node having an IP address external from the subnet, communicating with at least one network node also coupled to the subnet." Support for the claim amendment can be found in claims 5 and 6 as originally filed and in the specification as originally filed at least at page 10, lines 22-24. Reference is made to the appliance alias 160 throughout the discussion to represent the appliance 110 posing as a device having an IP address external from the subnet 180. The appliance alias 160 does not exist in physical form. The appliance alias 160 external from a subnet 180 can be understood from the appliance alias 160 representation in Fig. 1 as originally filed. Further support for the claim amendment is found at least at page 19, lines 25-27; page 20, lines 3-10 and lines 14-21. In contrast, Reed simply monitors communications on the network for a specified number of unanswered address resolution protocol (ARP) packets. Thereafter, a device monitoring the communications adopts the network address in the unanswered (ARP) packets and responds to the unanswered ARP packets with its physical address. See Reed's abstract, summary, and column 4, lines 19-39. Reed's Fig. 1, as compared to Applicant's Fig. 1, does not include a representation of a node "posing as a node having an IP address external from the subnet," where the subnet in Reed's Fig. 1 is indicated by reference number 18. The applicants respectfully submit that such statement is imprecise for two reasons: (i) masking the subnet is not posing as a node having an IP address external from the subnet" as recited in amended claim 1 and (ii) masking is merely a mathematical process used by network nodes for various network address processes. Masking itself does not perform a "posing" function. However, col. 3 (lines 32-38) taught masking the subnet and as such was posing (excluding the current subnet) on an external subnet, which permits for the dynamic address allocation mechanism as recited in that column and in the reference to Reed;

b) The applicants' claim 26 recites, determining an available local subnet configuration by a first network node in a local subnet; accessing a second network node located outside the local subnet for an available permanent network configuration, and assigning the available permanent network configuration to the first node. In contrast, Reed discloses only that a network node monitors communications on a network and determines an unused network address based on observations of unanswered ARP packets. Reed does not disclose a network node in a local subnet that determines an available subnet configuration then accesses a network node outside the local subnet for an available permanent configuration. Applicants note that a DHCP server provides a network address to a network node, but the network node does not itself determine an available local network configuration then access the DHCP server for a permanent network configuration. However, as disclosed by Reed, with the use of "subnet" addresses within the

Art Unit: 2142

system of figure 1, a node in a subnet could obtain a permanent address from a second node as covered in the Abstract, col. 1 (lines 30-67, "encapsulating" "MAC address", things akin to a subnet and not the Internet exc...); and as such, a device, not yet with a permanent address, can pose as one with such to obtain such from another node as claimed.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Harrell whose telephone number is (571) 272-3895. The examiner can normally be reached Monday thru Friday from 5:30 am to 2:00 pm and on weekends from 6:00 am to 12 noon Eastern Standard Time.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew T. Caldwell, can be reached on (571) 272-3868. The fax phone number for all papers is (703) 872-9306.

18. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.



ROBERT B. HARRELL
PRIMARY EXAMINER
GROUP 2142